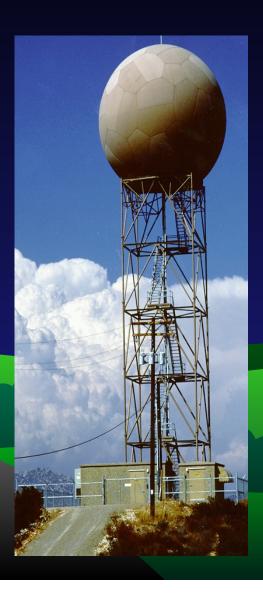
#### National Weather Service - San Diego

#### WEATHER FORECASTING

Winter Outlook Talk October 26th 2004

Weak El Nino
Conditions





# **Change November 9**

- **LAXQPSSAN to LAXQPSSGX**
- LAXQPSLAX to LAXQPSLOX

#### Jim Purpura

Meteorologist In Charge San Diego National Weather Service

Internet Address: HomePage

http://www.wrh.noaa.gov/sandiego

**Office Address** 

**National Weather Service** 

11440 West Bernardo Ct. - Suite 230

San Diego, CA 92127-1643

(858) 675-8700

Ed Clark, Warning Coordination Meteorologist Ext: 223

Edwin.Clark@noaa.gov

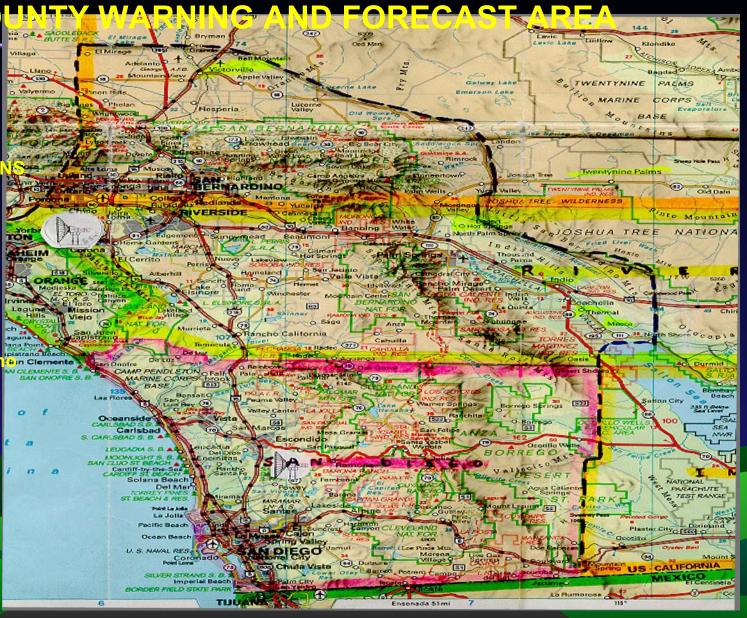
# News Items or review of past items or topics

- Ewarn an alternate way for emergency managers and others to get weather warnings from the NWS via email.
- New NOAA Weather Radio transmitters are on line - A new marine radio on Mt Soledad in San Diego County -162.425Mhz and Spanish Language radio in the Coachella Valley at 162.525Mhz.

#### SAN DIEGO NATIONAL WEATHER SERVICE OFFICE

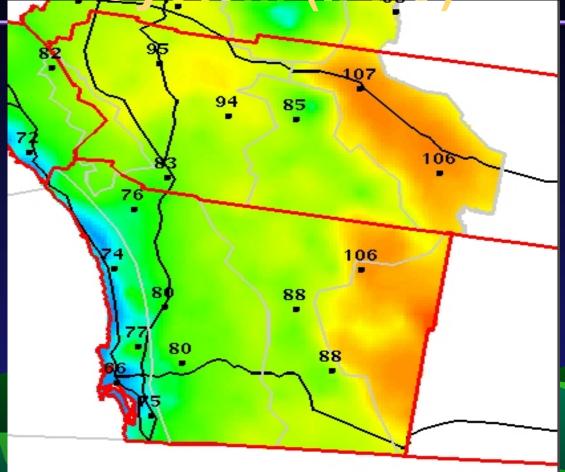
REPRESENT MILLIO
OF PEOPLE IN THE
4 COUNTY AREA

- 1. San Diego
- 2. Orange
- 3. West Riverside
- 4. SW San Bernardin



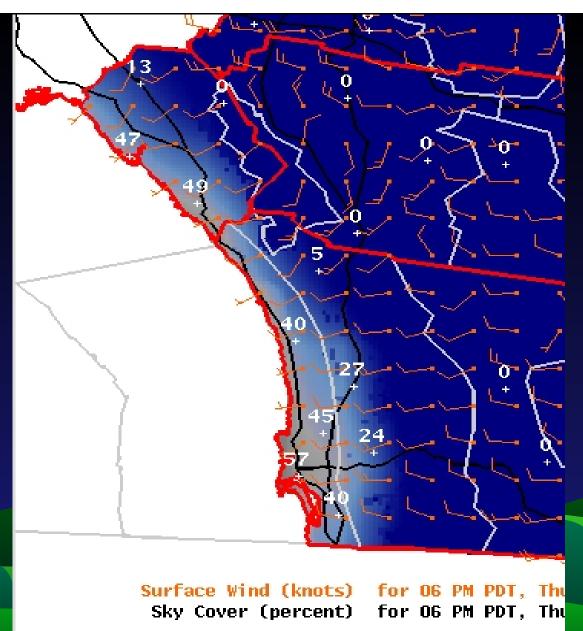
Interactive Forecast Preparation

<u>System (IFPS)</u>



Temperatures for 06 PM PDT, Thursday August 15, 2002

NWS San Diego





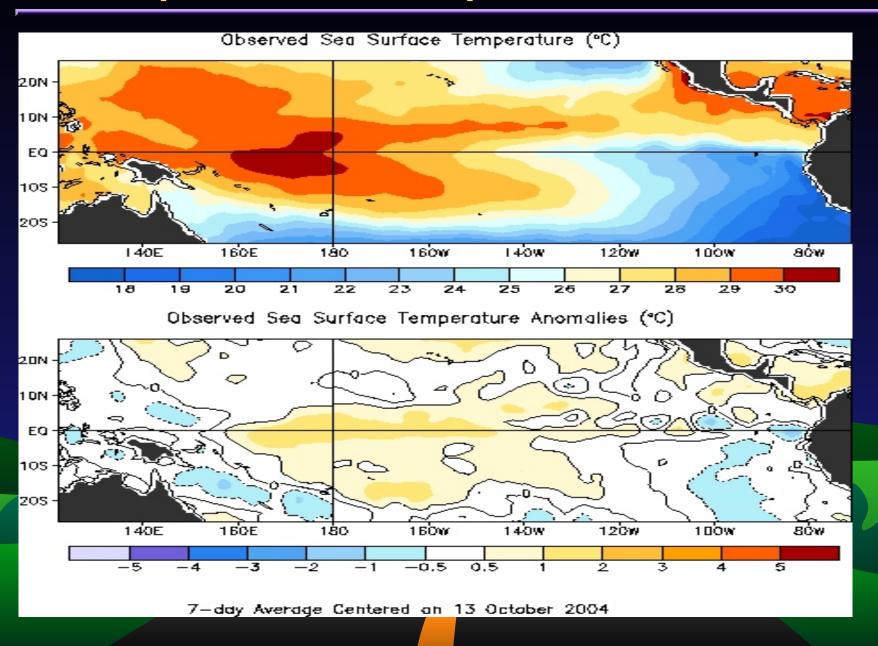
NWS San Diego

#### Weak El Nino

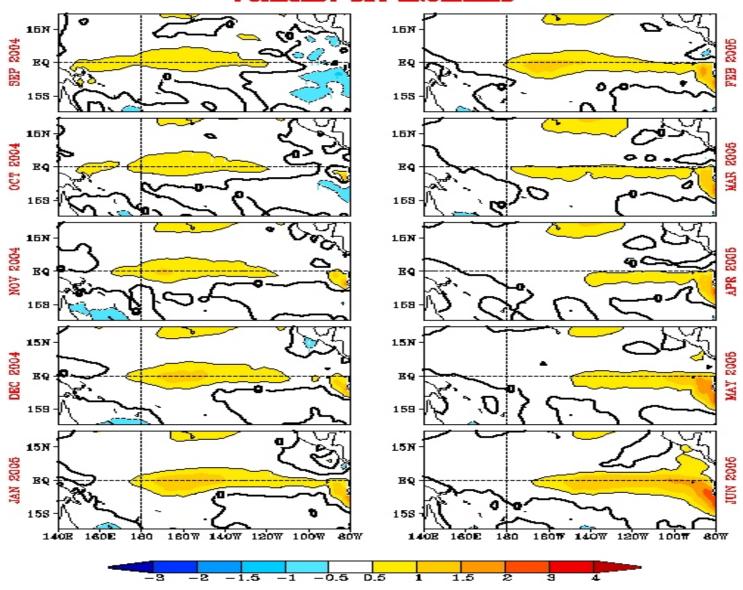
#### **Definition**

Water conditions in the tropical Pacific are considered a little above normal at this time with more warming expected.

#### **Tropical Water Temperature anomalies**

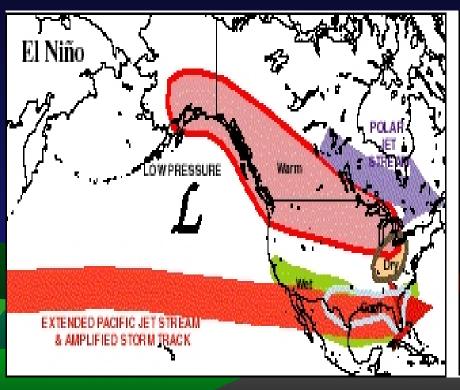


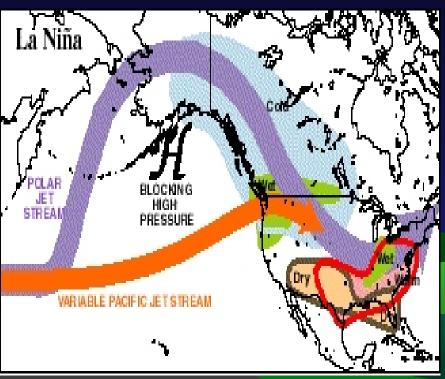
#### FORECAST SST ANOMALIES



Last Update: Tue Aug 31 2004

# El Nino Vs. La Nina Patterns

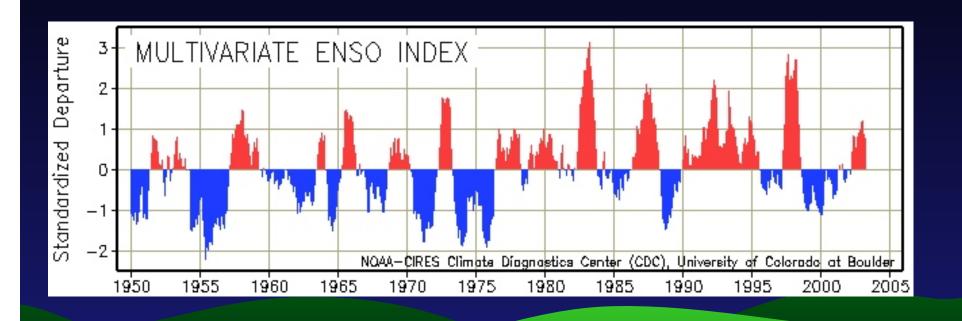




# But...what else might affect the pattern?

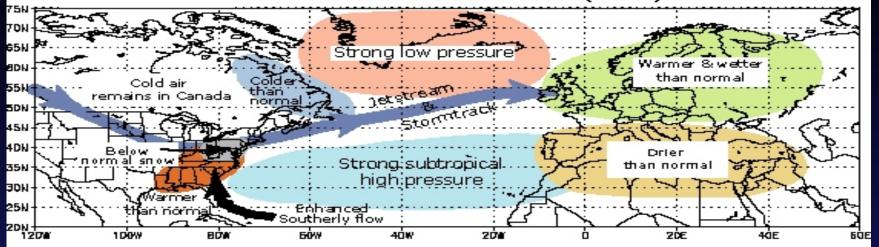
- PDO Pacific Decadal Oscillation
- Arctic Oscillation
- Madden-Julian Oscillation

# The PDO

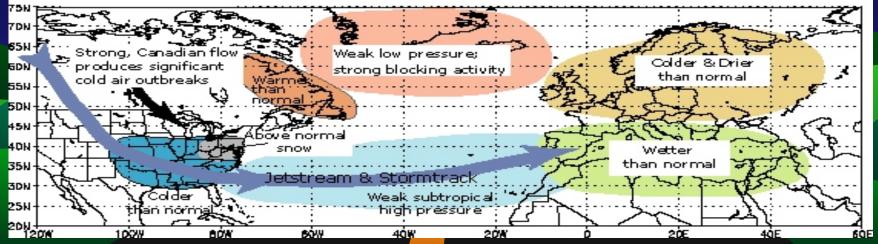


## **Arctic Oscillation**

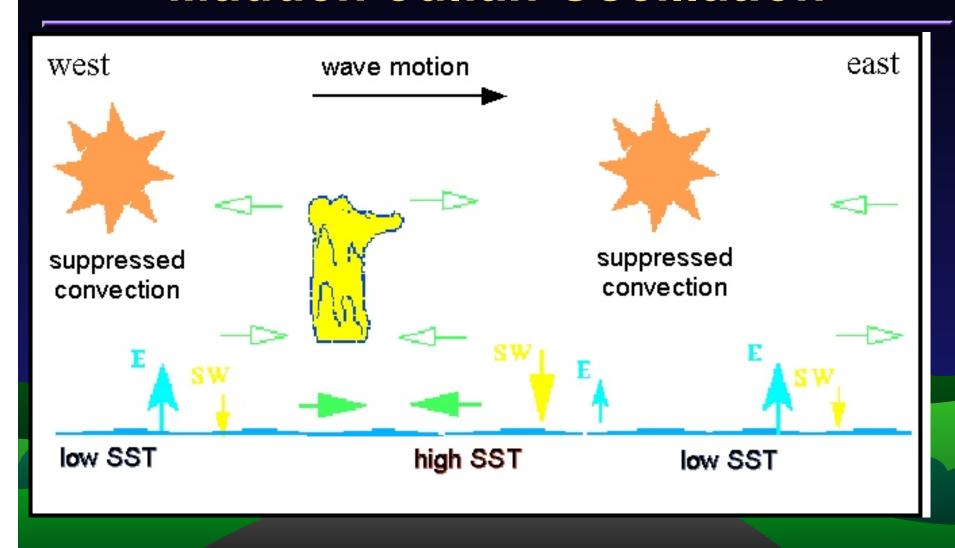
Positive Phase of the Wintertime North Atlantic Oscillation (NAO)



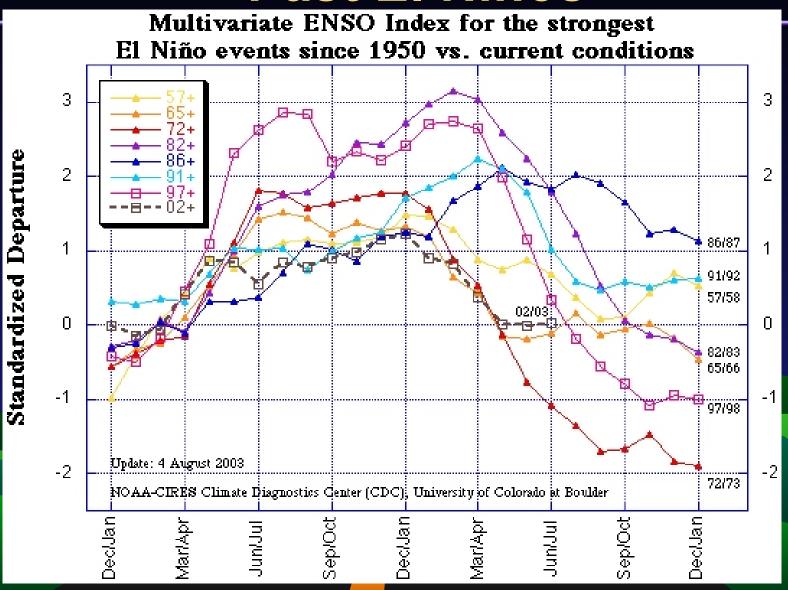
Negative Phase of the Wintertime North Atlantic Oscillation (NAO)

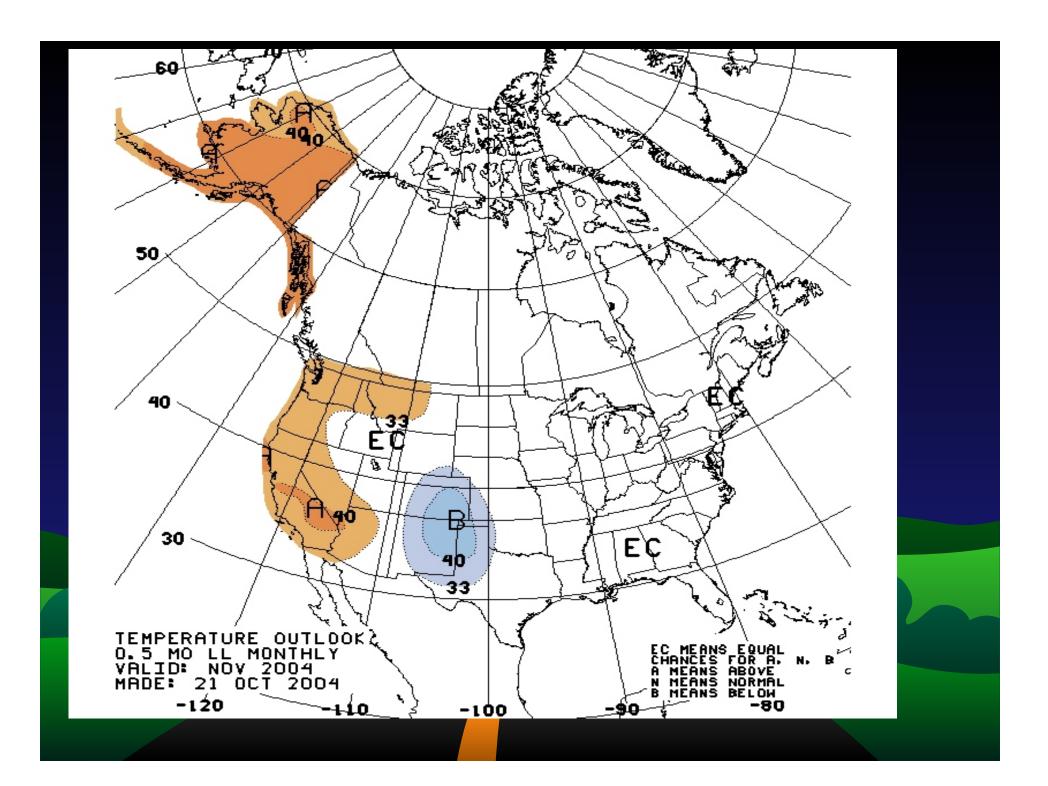


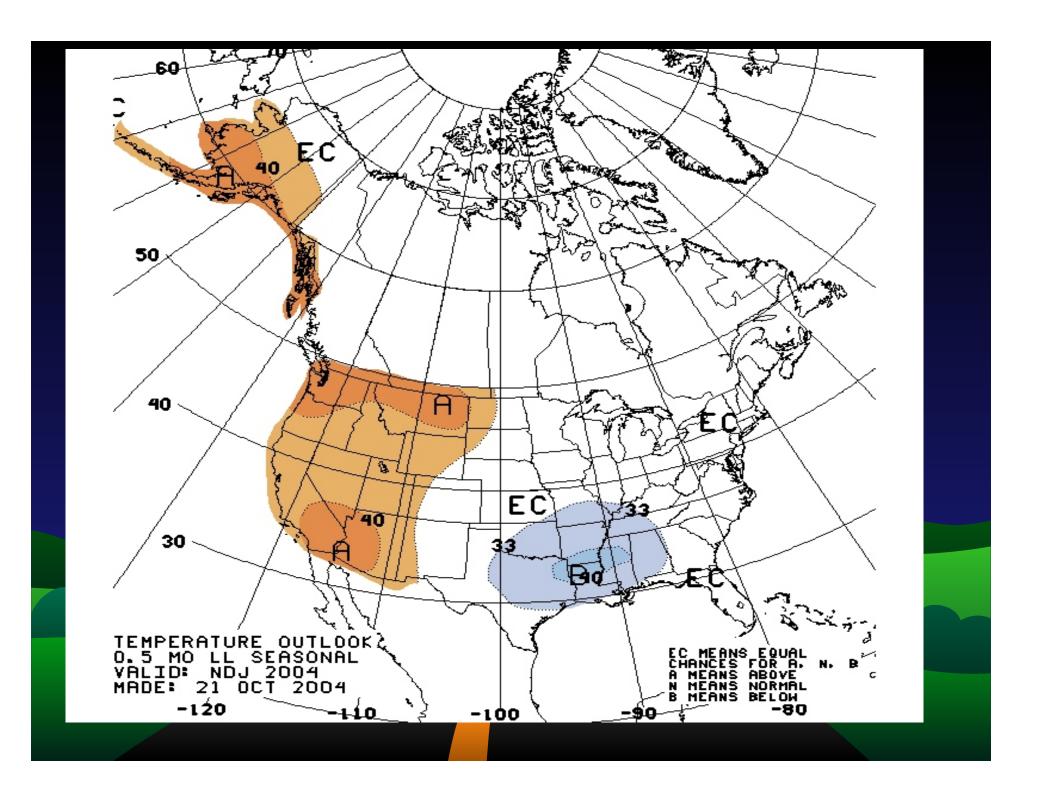
## Madden-Julian Oscillation

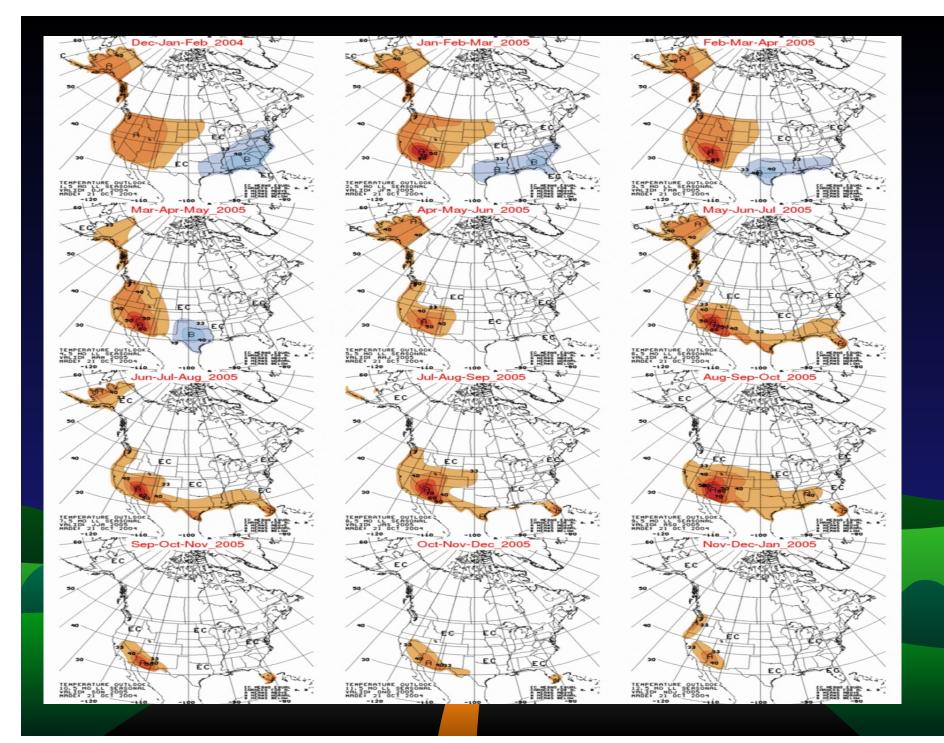


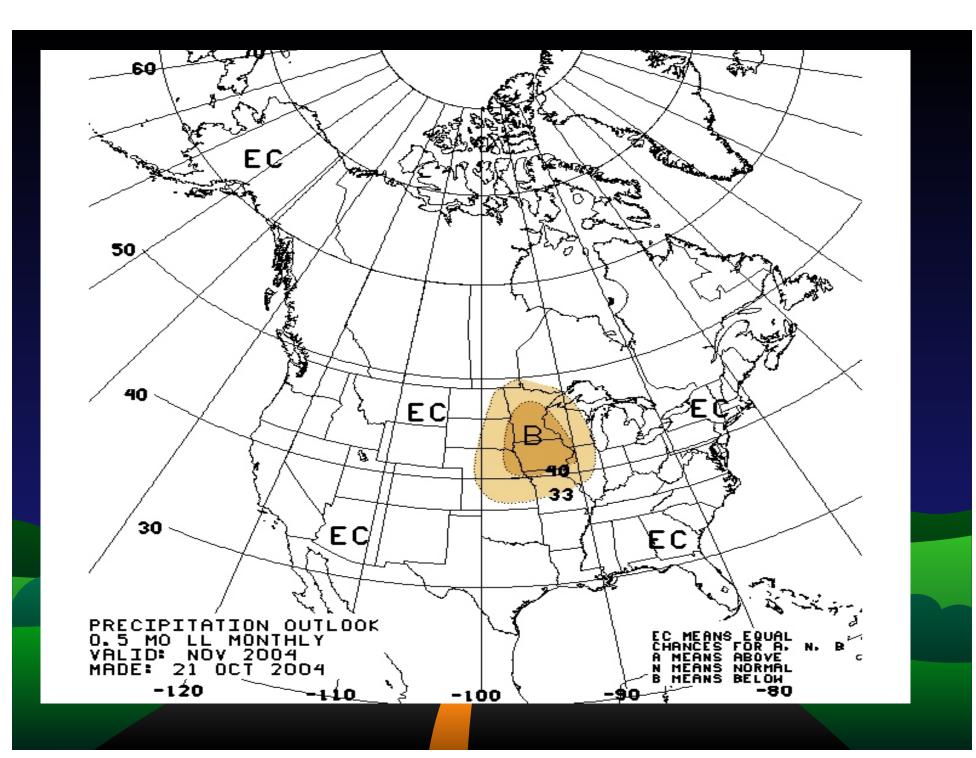
## **Past El Ninos**

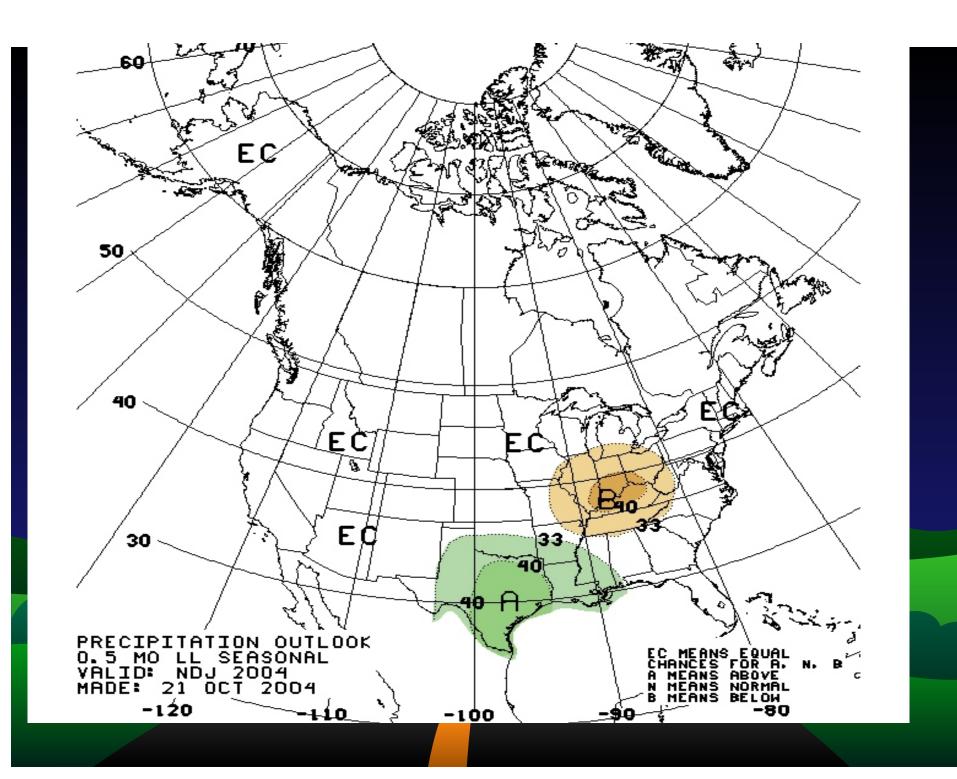


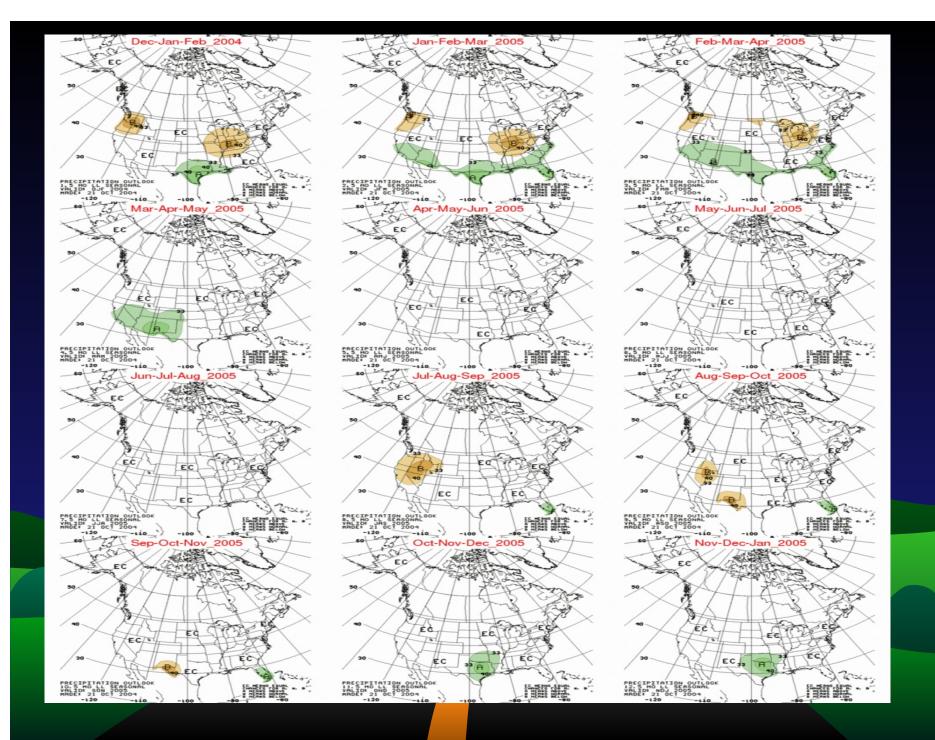










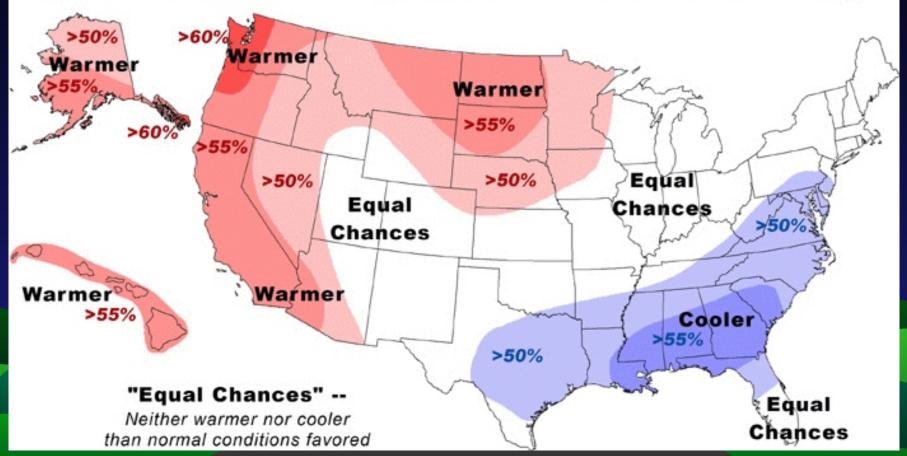




#### **Temperature Outlook**

Winter (Dec. - Feb.) 2004/05 Conditions Compared to 1971-2000 Normal



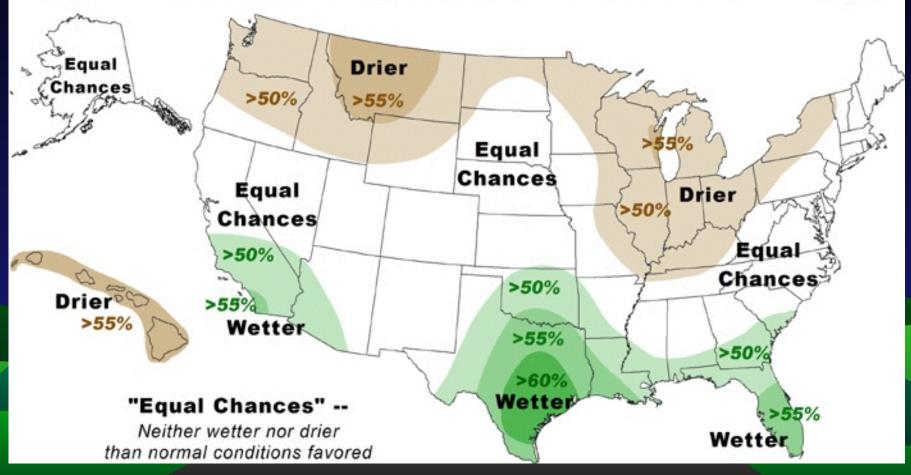




#### **Precipitation Outlook**

Winter (Dec. - Feb.) 2004/05 Conditions Compared to 1971-2000 Normal



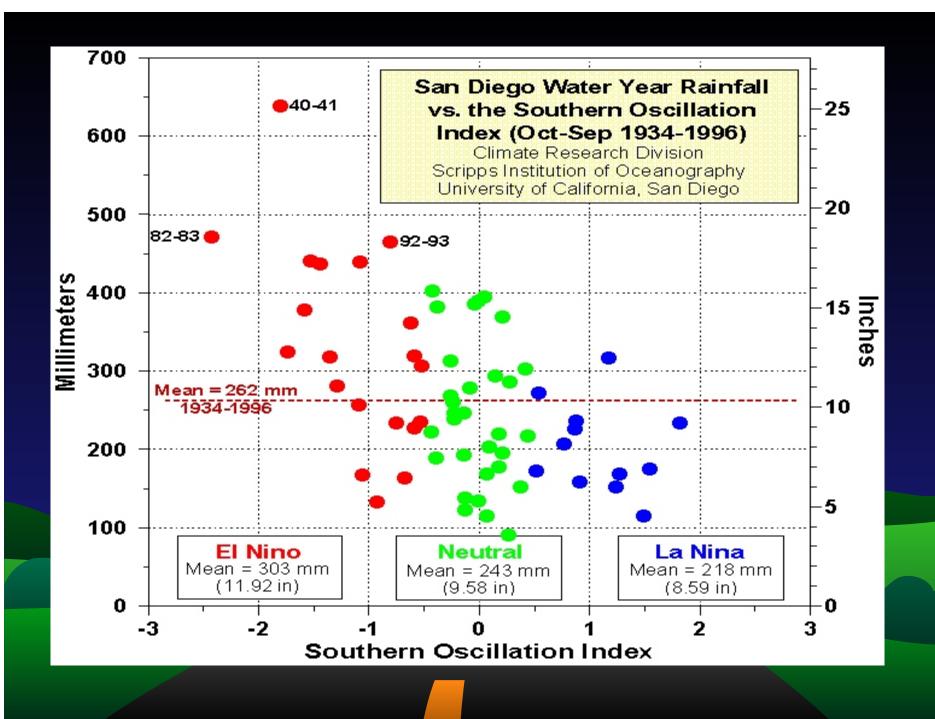




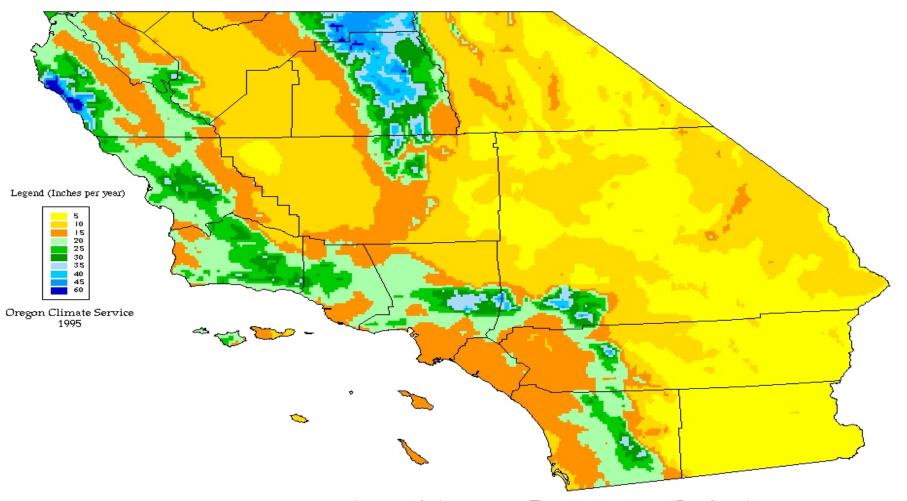
- Temperature changes affect storm tracks.
- Rainfall highly dependent on size of Sea Surface Temperature changes Negative or positive

#### Weak El Nino Conditions -

- Weak driving force in the atmosphere, thus confidence lower.
- ◆ Thinking right now is that we will end up somewhere around 80 to near 100% of normal for rainfall season. Flooding is still possible, of course.
- Near normal temperatures.



# Average Annual Precipitation (inches)



Annual Average Precipitation (Inches), Southern California

Period: 1961-1990

# Orange County 2004-05 Winter Season Rainfall Outlook

**Normal** 

**Outlook** 

**Coastal Sections** 

11.00 - 14.00

8.80 - 14.00 in.

(Seal Beach, Newport Beach, Santa Ana, Anaheim, etc.)

Mountains and Foothills 20.00 - 25.00 in.

16.00 in -25.00 in

(Locations such as Fremont Canyon)

#### **2004-05 Winter Season Rainfall Outlook**

October 2004 - March 2005 Rainfall Outlook For San Bernardino County

Normal

**Outlook** 

Valleys - Inland Empire 13.00 - 16.50 in. 10.50 - 16.50 in.

(Ontario, San Bernardino, Redlands)

Mountains

22.00 - 44.00 in. 17.50 - 44.00 in.

(Wrightwood, Lake Arrowhead, Big Bear Lake, etc.)

Apple and Yucca Valley 5.50 - 7.00 in.

4.50 - 7.00 in.

(Victorville, Apple Valley, Lucerne Valley, Yucca Valley, etc.)

#### 2004-2005 Winter Season Rainfall Outlook

October 2004 - March 2005 Rainfall Outlook For San Diego County

Normal

Outlook

Coastal Sections 8.50 in. - 11.00 in.

6.50 in. -11.00 in.

(Zone from the beach to several miles inland)

**Inland Valleys** 

12.00 in. - 16.50 in. 9.50 in. -16.50 in.

(Poway, Santee, La Mesa, Lemon Grove, El Cajon, Bonita, Fallbrook, Vista, Escondido, Rancho Bernardo, etc.)

**Mountains** 

26.00 in. - 40.00 in.

20.50 in. -40.00 in.

(Julian, Ranchita, Mt. Laguna, Palomar, etc.)

**Deserts** 

5.50 in. - 8.00 in.

4.50 in. -8.00 in.

(Borrego, etc.)

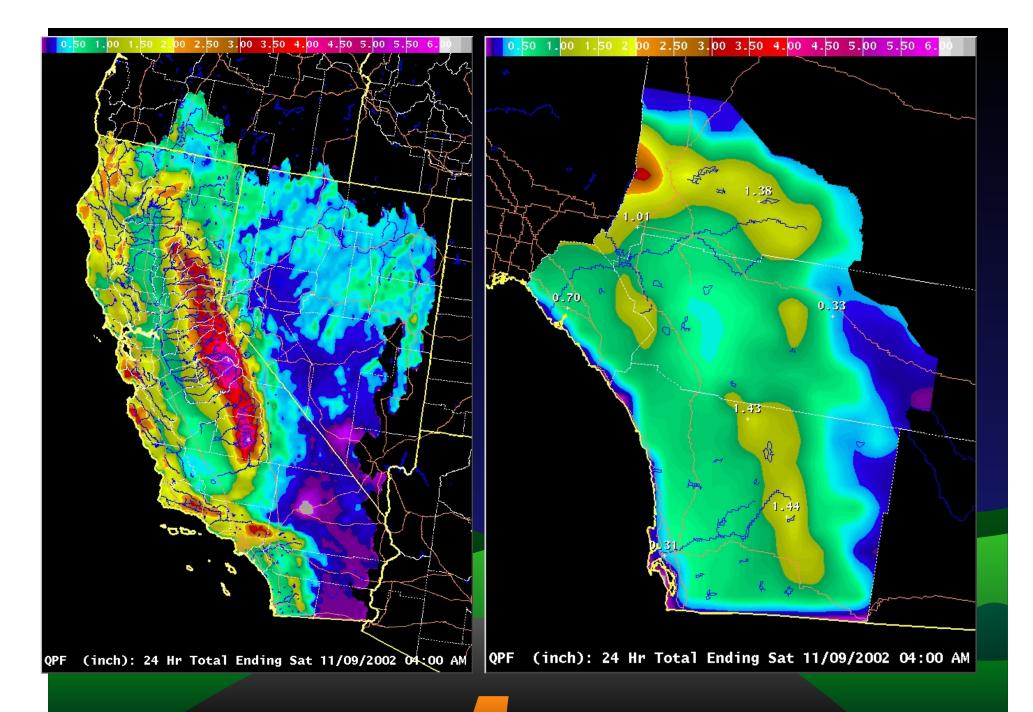
### 2004-05 Winter Season Rainfall Outlook

#### October 2004 - March 2005 Rainfall Outlook For Riverside County

Valleys - Inland Empire (Riverside, Perris, Temecula, Cabazon	9.00 - 13.00 in.	7.20 - 13.00 in.	
Mountains (Idyllwild, Pine Cove, etc.)	25.00 -40.00 in.	20.00 - 40.00 in.	
Coachella Valley (Palm Springs, Indio, Thermal)	3.00 -5.60 in.	2.50 - 5.60 in.	

# Rainfall Season 2003-2004

	Through Actual	June 30 Norma		
<ul><li>Laguna Beach</li></ul>	8.14in	13.56	60%	
Tustin	8.41	13.87	61%	
Idyllwild	16.60	27.80	60%	
Palm Springs	2.92	5.23	56%	
Riverside	6.07	9.85	62%	
Big Bear Lake	15.90	21.15	<b>75%</b>	
<ul><li>Ontario</li></ul>	7.25	14.77	49%	
San Diego	5.18	10.77	48%	
<ul><li>Palomar Mtn</li></ul>	20.08	29.96	67%	
<ul><li>Oceanside Marina</li></ul>	6.00	11.13	54%	
Borrego Desert Park	4.13	6.91	60%	



### **QPF Information**

- www.wrh.noaa.gov/cnrfc/index.html
- www.wrh.noaa.gov/afos/LAX/QPS/LAXQPSSAN

# THE END

